California Cancer Commission Studies*
Chapter VIII

Malignant Lymphoma

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THE terms malignant lymphoma or malignant lymphoblastoma are generally used to designate malignant disease of lymphoid tissues. In common usage these are spoken of as lymphosarcoma, leukemia, and Hodgkin's Disease. The nomenclature otherwise is unfortunately highly varied, controversial, and confusing.

Detailed classifications are necessarily those based largely on morphology and are among the trade tools of the pathologist. Such classifications are in a general way of value in estimation of prognosis and radiation sensitivity. Gall and Mallory [1] who have made one of the most exhaustive modern studies of the subject offer a morphologic classification based on a study of some 600 cases. This is readily applicable to clinical use and has sound histologic and clinical correlation. The classification is tabulated below along with the terms of more common usage as a reference for the individual who might encounter some of the less familiar terms:

Malignant Lymphoma (Classification of Gall and Mallory)	Various terms commonly used.
A. Stem cell lymphoma	Lymphosarcoma group; including reticulum cell sarcoma and monocytic reticuloendotheliosis.
B. Clasmatocytic lymphoma	
C. Lymphoblastic lymphoma	Lymphosarcoma, Lymphatic leukemia (acute and chronic)
D. Lymphocytic lymphoma	
E. Follicular lymphoma	Lymphosarcoma, giant follicle type, Brill-Symmers' Disease
F. Hodgkin's lymphoma	Hodgkin's Disease
G. Hodgkin's sarcoma	

The authors of this classification emphasize the fact that leukemia of lymphatic type is of incidental occurrence in malignant lymphomatous disease and that lymph node morphology does not differentiate between lymphosarcoma and lymphatic leukemia. Hematologic leukemic manifestations have been observed in all types of malignancies of lymphoid tissues.

The cause or causes of this group of diseases are unknown. Theories and observations related to their origins are numerous.

GENERAL CLINICAL OBSERVATION

The symptoms which may bring the patient to a doctor are many and varied.

The onset of disease of this type is usually insidious. The process may be present in hematologically diagnosable form before there is objective or subjective evidence that anything may be amiss. This is illustrated infrequently in individuals undergoing periodic physical examination or elective surgery, where a routine blood count reveals the presence of leukemia.

Painless swelling of the easily observed superficial lymph nodes is the most common early symptom of the entire malignant lymphoma group. In some cases, the secondary effect of expansive growth of deep lymph nodes may first call attention to the presence of the disease. Enlargement of mediastinal or bronchial lymph nodes may cause bronchial compression with resultant cough. The development of abdominal masses due to either splenic enlargement or mesenteric adenopathy is relatively frequent. Tumor masses originating in the lymphoid tissues of the stomach or intestine may cause mechanical obstructive symptoms or may produce ulceration of the overlying mucosa with resultant hematemesis or melena.

As a result of involvement of bone marrow, there is usually a decrease in the number of blood platelets so that hemorrhagic signs may appear. Sudden purpuric manifestations unrelated to or disproportionate to trauma are relatively frequent. Severe bleeding following tooth extraction or other minor surgery may occur. Epistaxis or unusual uterine bleeding may be the first indication of disease. Weakness or asthenia are frequent early symptoms which are, in part, related to anemia.

Unexplained fever is a frequent early finding in the malignant lymphomata. Indeed, all of the patient's early symptoms may suggest a low grade infection. Vague aching and pain in the extremities may be one of the subjective symptoms.

The general findings may give all of the clinical indications of the toxemis of tuberculosis. There is frequently unexplained weight loss.

Occasional patients have an initial complaint of generalized pruritis.

* Organized by the Editorial Committee of the California Cancer Commission.

CORRECTION:

Dr. John M. Kenney, whose article, "Childhood Cancer," appeared in this section of the November issue of California Medicine, is practicing in Santa Rosa, California, not in Sonoma as the signature line on the article indicated.